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(71)Applicant : NISSO KINZOKU KAGAKU KK
NIPPON STEEL CORP

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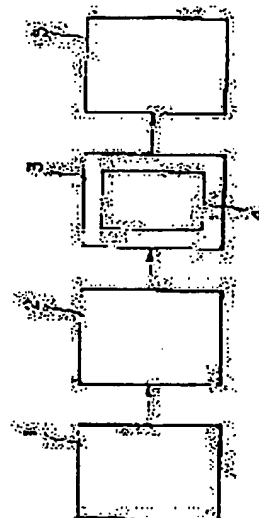
(72)Inventor : HASHIMOTO TATSUJI
OTAKE MINORU
OCHIAI YUKIO
OBA HIROSHI

(54) ZINC ALLOY FOR HOT DIP PLATING

(57)Abstract:

PURPOSE: To improve the workability and fatigue resistance of a Zn-5%Al alloy without deteriorating the high corrosion resistance by incorporating specified amts. of Ti and B as well as Al into Zn.

CONSTITUTION: A Zn alloy for hot dip plating is composed of, by weight, 3 to 10% Al, 0.01 to 0.3% Ti, 0.001 to 0.02% B and the balance Zn. One or more among 0.01 to 0.2% Si, 0.01 to 0.2% Mg, 0.01 to 0.3% Mn and 0.01 to 0.3% Cu may be incorporated into the alloy as required. Since Ti and B are contained in combination, the alloy has considerably improved elongation and impact value, but the desired effects are not produced in the case of below the lower limits of Ti and B. In the case of above the upper limits of Ti and B, the m.p. of the alloy rises and plating work efficiency is lowered. Though 3 to 10% Al ensures satisfactory ductility, the corrosion resistance of the alloy is deteriorated in the case of <3% Al and >10% raises the m.p. of the alloy.



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